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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/734,904 | 12/12/2003 | Christian Voser | 08774-273001 | 2398 |
| 26211 | 7590 | 05/19/2006 | EXAMINER | |
| FISH & RICHARDSON P.C. P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022 | | | KOHNER, MATTHEW J | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3653 | |

DATE MAILED: 05/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|-------------------|------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/734,904 | VOSER, CHRISTIAN | |
| | Examiner | Art Unit | |
| | Matthew J. Kohner | 3653 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 December 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>1/8/04; 9/27/04</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

The information disclosure statement filed Jan 8, 2004 fails to comply with 37 CFR 1.98(a)(3) because it does not include a concise explanation of the relevance, as it is presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information, of each patent listed that is not in the English language. It has been placed in the application file, but the information referred to therein has not been considered. Specifically, German patent 19840482 A1 does not have an English language translation or an explanation of relevance.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the

- a first optical receiver positioned to detect light from the transmitter which has been transmitted through and/or diffusely reflected from the banknote and which travels from the banknote to the first optical receiver *along a direction substantially parallel to said first direction* when viewed in said plane containing said normal and the scanning direction

- a scanning direction transverse to the first direction
- diffusely reflected light which travels in substantially the same path, but the opposite direction to the light incident on the banknote

must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-9 and 11-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "along a direction substantially parallel to said first direction when viewed in said plane containing said normal and the scanning direction" in claim 1 is an unclear phrase which renders the claim indefinite.

Similarly, the term "diffusely reflected light which travels in substantially the same path, but the opposite direction to the light incident on the banknote" in claims 9, 13 and 16 is an unclear phrase which renders the claims indefinite.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-16 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent 5,367,577 to Gotaas. (*hereinafter* "Gotaas").

In regard to claim 1 and 5, Gotaas discloses an apparatus for classifying a banknote in dependence upon, at least, the optical characteristics of the banknote, the apparatus comprising:

- scanning means for optically scanning the document (see Fig. 3)

- an optical transmitter (K) for directing light at the scanned banknote in a first direction inclined to the normal direction of the banknote when viewed in a plane containing said normal and the scanning direction;

- a first optical receiver (d1) positioned to detect light from the transmitter which has been transmitted through and/or diffusely reflected from the banknote and which travels from the banknote to the first optical receiver along a direction substantially parallel to said first direction when viewed in said plane containing said normal and the scanning direction (Fig. 3, see also col. 7, lines 34 et seq.);

- a second optical receiver (D2) positioned to detect light from the transmitter which has been specularly reflected from the banknote (col 6, lines 34-35 where Gotaas discloses the angle of reflection = the angle of incidence; i.e. specular reflection); and

- classifying means (col. 8, lines 58-60) responsive to, at least, the outputs of the first and second optical receivers for determining the authenticity and/or denomination of the banknote.

In regard to claims 2-4, see Fig. 3.

In regard to claim 6, Gotaas discloses receivers (D1 and D3) for diffusely reflected light.

In regard to claims 7-9 and 11-16, see Fig. 3.

In regard to claim 10, Gotaas discloses an apparatus for classifying a banknote in dependence upon, at least, the optical characteristics of the banknote, the apparatus having

classifying means (col. 8, lines 58-60) responsive to light indicative of the spectral characteristics of the banknote which has been transmitted through and/or diffusely reflected from, the banknote, and further responsive to light which has been specularly reflected from the banknote (See Fig. 3).

Claims 1-4 and 7-10 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent Publication 2003/0042438 A1 to Lawandy et al. (*hereinafter* "Lawandy").

Lawandy discloses an apparatus for classifying a banknote in dependence upon, at least, the optical characteristics of the banknote, the apparatus comprising:

- scanning means for optically scanning the document (see Fig. 5b; see also page 3, para. 43);
- an optical transmitter (8; see also Fig. 6a) for directing light at the scanned banknote in a first direction inclined to the normal direction of the banknote when viewed in a plane containing said normal and the scanning direction;
- a first optical receiver positioned to detect light from the transmitter which has been transmitted through and/or diffusely reflected from the banknote and which travels from the banknote to the first optical receiver along a direction substantially parallel to said first direction when viewed in said plane containing said normal and the scanning direction (page 3, para 47-49);
- a second optical receiver positioned to detect light from the transmitter which has been specularly reflected from the banknote (page 3, para 47-49); and
- classifying means responsive to, at least, the outputs of the first and second optical receivers for determining the authenticity and/or denomination of the banknote (page 5, para 68).

In regard to claim 2-4, see Fig. 6a and b.

In regard to claim 7, see Lawandy page 3, para. 43.

In regard to claims 8 and 9, see Fig. 6a.

In regard to claim 10, Lawandy discloses an apparatus for classifying a banknote in dependence upon, at least, the optical characteristics of the banknote, the apparatus having classifying means (page 3, line 68) responsive to light indicative of the spectral characteristics of the banknote which has been transmitted through and/or diffusely reflected from, the banknote, and further responsive to light which has been specularly reflected from the banknote (See Fig. 6a).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5, 6 and 11-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lawandy in view of US Patent No. 5,139,339 to Courtney et al. (hereinafter "Courtney").

While Lawandy discloses measuring diffused light, Lawandy does not disclose a second receiver for receiving light transmitted through the banknote. However, Courtney discloses measuring light received through the banknote (See Fig. 2); see also col. 3, line 3 et seq. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Lawandy, to replace Lawandy's receiver which measures diffused light, with a receiver which measures light transmitted through the banknote, as taught by Courtney, because, Courtney discloses receivers which measure reflected light and receivers which measure light

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transmitted through a bill are well known equivalents which perform the same function see col. 3, line 3 et seq.

In regard to claim 6, While Lawandy discloses measuring diffused light, Lawandy does not disclose a third receiver for receiving light transmitted through the banknote. However, Courtney discloses measuring light received through the banknote. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Lawandy to add a receiver for receiving light transmitted through the banknote, as taught by Courtney, because, Courtney discloses receivers for measuring reflected light and receivers for measuring light transmitted through the bill are well known equivalents which perform the same function. Further, the additional sensor would provide more a accurate determination of the bill.

In regard to claim 11 and 14, see Lawandy page 3, para. 43.

In regard to claims 12, 13, 15 and 16, see Fig. 6a.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew J. Kohner whose telephone number is 571-272-6939. The examiner can normally be reached on Mon-Fri 9-5:30.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Crawford can be reached on 571-272-6911. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Matthew J. Kohner
Examiner
Art Unit 3653

mjk


GENE O. CRAWFORD
SUPERVISORY PATENT EXAMINER